

the NIH *Record*

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U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

August 11, 1964
Vol. XVI, No. 16

NATIONAL INSTITUTES OF HEALTH
PUBLIC HEALTH SERVICE

Dr. Stone Named NIGMS Director, Succeeds Powell

Dr. Frederick L. Stone, Chief of the Division of Research Facilities and Resources, was recently appointed Director of the National Institute of General Medical Sciences. The appointment, effective August 1, was announced by Dr. James A. Shannon, Director of NIH.



Dr. Stone

Dr. Stone succeeds Dr. Clinton C. Powell, the first Director of NIGMS, who resigned July 31 to become Associate Coordinator of Medical and Health Sciences of the University of California. (*NIH Record*, July 28.)

The National Institute of General Medical Sciences administers the PHS grant programs for research in the sciences basic to medicine and biology, to public health, and to certain clinical sciences.

The Institute makes awards and administers grant programs for training investigators in the basic biomedical sciences and provides fellowships for general research training.

In recognition of the importance of these functions, the Congress

(See DR. STONE, Page 6)

3 Trouble Desks Receive 75,000 Calls Per Year for PEB's 'Quickie' Service

Faucet dripping? Sink drain plugged? Light bulb burned out? Door hinges squeaking? When problems like these arise, a telephone call through the trouble desks of the Plant Engineering Branch (PEB) will get them taken care of.

Maintenance and operation of NIH buildings and grounds is big business, and formal procedures are necessary for major projects, but PEB has "quickie" procedures for handling small complaints.

PEB receives about 95,000 requests for services per year. However, 75,000, or almost 80 percent of these requests are handled by telephone through the trouble desks.

Nearby Section of Beltway Opens to Traffic Monday

The new Capital Beltway section between Wisconsin and Georgia Avenues is scheduled to open for traffic next Monday, August 17, according to information obtained by the NIH Plant Safety Branch from the State Roads Commission.

Information concerning entrance and egress routes to and from this section of the Beltway will be posted on NIH bulletin boards.

Terry Urges Vaccination Of Airport, Seaport and Land Border Workers

Surgeon General Luther L. Terry has recommended that persons who work in and around international seaports, airports, and land border points of entry and those who meet and treat the sick be vaccinated against smallpox at least every three years, preferably every year.

The recommendation in no way affects the present vaccination requirement for persons entering the United States. They must have been vaccinated within the past three years.

"The jet airplane has brought smallpox to our doorsteps," Dr. Terry said, "and the danger of the disease being imported into the United States has therefore never been greater."

The remaining 20,000 requests are more complicated, requiring varying degrees of advance planning, scheduling, and ordering of special material. Only about 250 of these requests require the attention of design engineers.

Each of the three trouble desks has available to its dispatcher a number of skilled craftsmen who answer the complaints. These in-

(See TROUBLE DESKS, Page 6)

GRACE, Nation's Speediest Typesetter, Turns Out 3,600 Words Per Minute

Installation of the Nation's fastest computer-driven phototypesetter as a part of the Medical Literature Analysis and Retrieval System (MEDLARS) of the National Library of Medicine, in its modern \$7.5 million building on the NIH reservation, was announced last week by Dr. Martin M. Cummings, NLM Director.



The electronic control unit of GRACE is operated by Donald M. Dodson of NLM's Data Processing staff. Behind him, not shown, is the phototypesetter's other half, containing a magnetic tape transport and an optical unit.

Information Center for Dental Research Set Up Under NIDR Contract

The first Dental Research Information Center in the United States will be set up by the American Dental Association under a contract from the National Institute of Dental Research.

A cooperative project of the American Dental Association and the National Institutes of Health, the center is expected to become a national clearing house for information on dental research resources, projects, personnel, training facilities, administrative practices and expenditures.

An Advisory Committee, representing the interests of the ADA Council on Dental Research, the American Association of Dental Schools, the International Association for Dental Research, and the National Institute of Dental Research will guide the development and operation of the center.

Called Graphic Arts Composing Equipment (GRACE), the computer-driven printer operates at the rate of 300 characters or approximately 60 five-letter words per second, or 3,600 words per minute. This is more than 25 times faster than previous phototypesetters, according to its developers.

Calls It Breakthrough

"Speed is one of the real needs in the handling of scientific information today," Dr. Cummings said. "GRACE represents a breakthrough in printing technology, and I know of no area more important for its use than in the production of materials for medical scientists, teachers and practitioners."

GRACE is employed by MEDLARS to print Index Medicus, NLM's monthly listing of the world's medical literature, and recurring bibliographies in special biomedical fields.

Uses 3 Fonts

Unlike the standard computer printout, GRACE uses three fonts of type in six-point, 10-point and 14-point sizes, in both upper and lower case.

The three fonts contain a total of 226 characters, including special characters such as diacritical marks for the vernacular titles of certain foreign language articles.

The first issue of Index Medicus

(See GRACE, Page 5)

NCI Investigates Shrew

The National Cancer Institute has awarded a \$22,745 research contract to Tulane University's Delta Primate Research Center, Covington, La., to investigate the suitability of the tree shrew, a small, mouselike mammal, for laboratory studies of viruses that may cause human cancer.

the NIH Record

Published bi-weekly at Bethesda, Md., by the Public Information Section, Office of Research Information, for the information of employees of the National Institutes of Health, principal research center of the Public Health Service, U. S. Department of Health, Education, and Welfare.

NIH Record Office.....Bldg. 31, Rm. 4B13. Phone: 49-62125

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The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policy of the paper and the Department of Health, Education, and Welfare.

NEWS from PERSONNEL

TYPISTS, STENOS AVAILABLE

There are now 150 clerk-typists, GS-2, and 50 clerk-stenos, GS-3, on the registers of the NIH Board of USCS Examiners.

According to Executive Secretary Howard C. May, they met higher standards to attain eligibility than the typists at GS-3 and stenos at GS-4 had to meet a year ago. Therefore, these candidates, available for full time employment at NIH, are excellently qualified for consideration by I/D operating officials in filling such vacancies.

CONTROL OF DETAILS

The Secretary, DHEW, recently directed that all details of personnel to other departments and agencies be cleared by the Office of Financial Management. In so doing, he mentioned two major principles governing such details:

- An organization is expected to operate within its appropriations and must avoid such practices that indirectly supplement these funds.

- Details are not to be used except in an emergency that cannot be met by other temporary internal adjustment of assignments or workload.

These principles also apply to details within NIH. While they are a means of meeting emergency situations (listed in Guide 2, Chapter III of the Personnel Guides for Supervisors), details generally are appropriate only when necessary services cannot be obtained through regular assignments.

They must not be used to avoid personnel actions—reassignments, promotions, demotions or separations. Details for prolonged periods, too many details, and repeated re-

Central Mail Room Extends Closing Time to 5:30 P. M.

The Central Mail Room in Building 31 is now open daily, Monday through Friday, until 5:30 p.m. for receipt of outgoing mail, it was announced recently by Horace H. Thomas, Chief of the Mail and Messenger Unit, Office Services Branch.

Mr. Thomas said the mail could be brought or tubed to the Central Mail Room. The tube station is ASO.

Previously the mail room was open only until 5 p.m.

newals violate this principle.

Since details frequently lead to permanent assignment, the way an employee is selected also is important.

If he does not have the required qualifications or cannot be selected competitively under the promotion program, he cannot be reassigned or promoted into the position. The supervisor must then select and train another person, and the detailed employees may feel unjustly penalized.

I/D Personnel Officers are ready to advise and assist in determining the propriety of proposed details and in identifying qualified employees.

REGISTRATION TO VOTE

NIH personnel are reminded that they must be registered in order to vote in the general elections in November. For registration in the greater Washington area:

Montgomery County boards are open now through September 21 at the Court House, Rockville, and in Prince Georges County through September 22 at the Court House, Upper Marlboro.

Washington, D. C. registration is open through September 18 at

Pay Raise Bill Is Approved by Congress Retroactive to July 1; Schedule Listed

Civil Service classified employees will receive pay increases retroactive to the first pay period after July 1 as a result of pay-raise legislation enacted last Tuesday and signed into law by President Johnson.

It was expected that the new rates would be reflected in the paychecks of August 25.

List of Latest Arrivals Of Visiting Scientists

7/14—Dr. Tohru Tobita, Japan, Research in the Laboratory of Biochemistry, Enzyme Chemistry Section. Sponsor: Dr. Frank J. McClure, NIDR, Bldg. 30, Rm. 416.

7/20—Dr. James A. Mullaney, Ireland, Research at the Clinical Neuropharmacology Research Center, Clinical Studies. Sponsor: Dr. Felix von Mendelssohn, NIMH, Saint Elizabeths Hospital.

8/3—Dr. Akinyele Fabiyi, Nigeria, Research in the Perinatal Research Branch, Section on Infectious Diseases. Sponsor: Dr. John L. Sever, NINDB, Bldg. 7, Rm. 202.

8/3—Dr. Herbert Schumacher, Switzerland, Research in the Laboratory of Chemical Pharmacology. Sponsor: Dr. Bernard B. Brodie, NHI, Bldg. 10, Rm. 7N117.

Minor differences in the legislation previously passed by the two Houses of Congress were ironed out in sessions of the Joint Congressional Committee.

Under the new law the Civil Service Commission will promptly establish new special minimum rates and rate ranges for certain scientists and engineers, medical officers, pharmacologists, and other categories; and will publish pay regulations for conversion from present special scales.

Salary Schedule Below

Full information regarding these special rates was not available at this writing. Inquiries regarding the new salaries should be directed to the Institute/Division personnel offices.

The General Services salary schedule, as approved by the House-Senate committee and passed by voice vote, is printed below.

Grade	Per annum rates and steps									
	1	2	3	4	5	6	7	8	9	10
GS-1	\$3,385	\$3,500	\$3,615	\$3,730	\$3,845	\$3,960	\$4,075	\$4,190	\$4,305	\$4,420
GS-2	3,680	3,805	3,930	4,055	4,180	4,305	4,430	4,555	4,680	4,805
GS-3	4,065	4,190	4,315	4,440	4,565	4,690	4,815	4,940	5,065	5,190
GS-4	4,480	4,630	4,780	4,930	5,080	5,230	5,380	5,530	5,680	5,830
GS-5	5,000	5,165	5,330	5,495	5,660	5,825	5,990	6,155	6,320	6,485
GS-6	5,505	5,690	5,875	6,060	6,245	6,430	6,615	6,800	6,985	7,170
GS-7	6,050	6,250	6,450	6,650	6,850	7,050	7,250	7,450	7,650	7,850
GS-8	6,630	6,850	7,070	7,290	7,510	7,730	7,950	8,170	8,390	8,610
GS-9	7,230	7,465	7,710	7,955	8,200	8,445	8,690	8,935	9,180	9,425
GS-10	7,900	8,170	8,440	8,710	8,980	9,250	9,520	9,790	10,060	10,330
GS-11	8,650	8,945	9,240	9,535	9,830	10,125	10,420	10,715	11,010	11,305
GS-12	10,250	10,605	10,960	11,315	11,670	12,025	12,380	12,735	13,090	13,445
GS-13	12,075	12,495	12,915	13,335	13,755	14,175	14,595	15,015	15,435	15,855
GS-14	14,170	14,660	15,150	15,640	16,130	16,620	17,110	17,600	18,090	18,580
GS-15	16,490	17,030	17,570	18,110	18,650	19,190	19,730	20,270	20,810	21,350
GS-16	18,935	19,590	20,245	20,900	21,555	22,210	22,865	23,520	24,175	24,830
GS-17	21,445	22,195	22,945	23,695	24,445					
GS-18	24,500									

Suggestion: Clip this for handy purse or wallet reference use.

the District Building, Room 8.

All Virginia boards in the area are open from now through October 3. Locations are Arlington Court House; the City Halls in Alexandria, City of Fairfax, and Falls Church; and the Central Office of Fairfax County.

A special notice on all NIH bulletin boards lists the regular hours the boards are open and dates on which supplemental evening hours and locations are scheduled.

Applications for absentee ballots for those who vote in other States may be obtained from the Employee Relations and Services Section, PMB, Bldg. 1, Rm. 31A.

All employees are encouraged to exercise their right and responsibilities as citizens by registering and casting their ballots in the approaching election.

Safety Glasses Fitted Here Monday, 12-4

The Plant Safety Branch has made arrangements for an optician to visit NIH on Monday of each week from 12 noon to 4 p.m. to measure, fit, and deliver employee safety glasses.

Previously it was necessary for employees to go to Bethesda to be measured for safety glasses and again to pick them up when ready.

Employees eligible for safety glasses should bring their completed Request for Safety Glasses forms to the Safety Office, Bldg. 31, Rm. 1B30, for measurement by the optician.

Glasses will usually be ready for pickup by the employee at the same location the following Monday.

Neurology Researchers Describe New Type of 'Floppy Infant' Disease

A new disease characterized by a unique morphological abnormality of the muscle cell associated with non-progressive weakness was described in studies recently reported by the National Institute of Neurological Diseases and Blindness.

The term "floppy infant" was originally used to group many disorders characterized by muscular weakness.

In recent years, however, this has been divided into three major classifications: (a) progressive cases, which include infantile spinal atrophy (Werdnig-Hoffmann) and infantile progressive muscular dystrophy; (b) virtually stationary forms, including "central core disease"; and (c) floppy infants which improved, "benign congenital hypotonia."

Disease Described

A new disease, "Nemaline myopathy," which appeared to be one of the stationary forms, was found to be a condition not previously described.

Its description was based on a correlation of the clinical, pathological, cytochemical, and electron microscope studies.

The index case, a 4-year-old girl, had the clinical picture of a "floppy infant" from the perinatal period. The disease was clinically manifested by moderately slowed motor development and muscle weakness.

The upper extremities were more involved than the lower and the muscles were of lesser bulk than normal. No fasciculations were noted. Tendon reflexes were absent and the child was hypotonic. Intelligence was not reduced.

Three other individuals in two generations of the same family had borderline clinical or laboratory evidence of altered neuromuscular function, suggesting a possible genetic association.

Researchers Named

These studies were conducted by Drs. G. Milton Shy, W. King Engel, J. E. Somers, and the late Theodor Wanko, and were reported in *Brain*, a *Journal of Neurology*.

The details of the laboratory investigations provide a pattern for characterizing the disease. There were striking findings in the internal architecture of the affected muscle fibres.

About half of the normal size fibres contained highly organized rod-shaped structures, which had a periodic cross-banding along their length of 145 angstrom units, detected with the electron microscope. Collections of these abnormal rods were in portions of affected muscle fibres.

Cholera Lab in Dacca Reveals Progress Despite Difficulties



Dr. Robert Gordon, until recently Chief of Clinical Research at the Pakistan-SEATO Cholera Research Laboratory in Dacca (right), checks by stethoscope the condition of a cholera patient there. He is assisted by (l. to r.) Nurses Kelly Vrooman and Suratun Nessa.

By Tony Anastasi

A deathly ill young woman on a stretcher, a diseased old man on the floor of an overcrowded hospital, an ailing boy with an almost imperceptible pulse—these are among the memories that Dr. Robert Gordon brings home from Dacca, East Pakistan.

Now back with the National Heart Institute's Laboratory of Metabolism, Dr. Gordon has served as Chief of Clinical Research at the Pakistan-SEATO Cholera Research Laboratory in Dacca since 1961. His replacement is Dr. William B. Greenough of NHI, assisted by Dr. John Lindenbaum, also of the Heart Institute.



Dr. Abram Benenson, Director of the Cholera Research Lab (right), discusses current programs with Konthi Suphamongkhon, Secretary-General of SEATO, who visited NIH May 26.

In addition, a positive correlation was found between the presence of these rods in a given fibre and enzymatic activity. Histochemically, the rods themselves did not fluoresce to heterogenous myosin or tropomyosin antibody, and were ATPase negative.

The 145 angstrom periodicity indicated the rods contained a protein in the myosin family, but the histochemical studies indicated that it was not myosin itself.

Since the formations in the fibres appeared to represent rods or thread-like structures, it was deemed appropriate to name this disease "Nemaline myopathy."

Study Seeks Data On Cell Genetics And Evolution

The interrelationship between protein structure and function and the relationship of these to the activities of the cell's nucleic acids will be studied at the University of California, San Diego, under a grant from the National Institute of General Medical Sciences.

These studies are part of a multi-faceted research program aimed at gaining further understanding of cell genetics and evolution. The \$258,636 grant will support the first year's research activities of a proposed 5-year program.

Dr. S. J. Singer, Professor and recently appointed Chairman of the Department of Biology, and Dr. Martin D. Kamen, Professor of Chemistry, will be Program Director and Co-Director, respectively.

Resources Available

The research team will draw on the resources of both the departments of biology and chemistry in an integrated study of the molecular basis of cell heredity, particularly protein structure and function, and DNA and RNA, the cellular information carriers.

It is known that DNA, the master molecule of heredity, contains the information that determines the characteristic proteins of a cell and that RNA translates the information into biosynthesis.

The investigators will study the informational molecules involved in heredity and investigate their role in directing the formation of macromolecules, and in coordinating and regulating the biochemical activities of single cells.

"We hope to adapt an understanding of the control mechanisms derived from a study of the genetics and biochemistry of regulation in microorganisms to experiments designed to clarify the role that macromolecules play in the development of mammalian cells," Dr. Singer said.

To Study Cell Energy

Another segment of the program will concentrate on the problem of energy storage and utilization in cells, particularly as exemplified by the photosynthetic process, and electron transfer in cells of plant, animal, and bacterial origin.

The team will also examine the modification of protein structure and synthesis as effected by rearrangement in the genetic material, DNA, occurring either as mutations in laboratory stocks or as accumulations of selected materials in evolution.

The Cholera Research Laboratory, with its 20-bed patient ward is like the 516-bed NIH Clinical Center in one respect: both have approximately twice as much lab space as patient-care space.

Differences Cited

But there the similarities end.

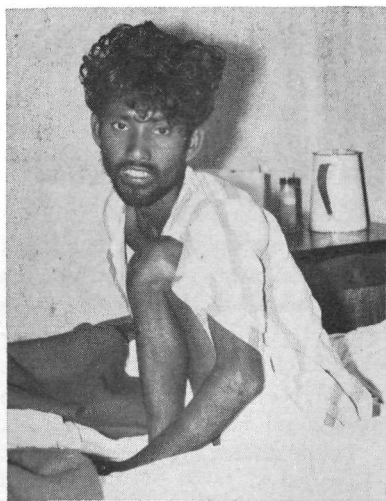
In the U. S. there are 51 people per square mile; in East Pakistan, 1,000. Here there is an automobile for every 3.1 persons; there the ratio is one to every 4,000. Here each telephone is used by 1.1 persons; there the ratio is one to 2,000. Here the illiteracy rate is two percent; in East Pakistan it is 80 percent.

The Cholera Research Laboratory receives support from the Governments of Pakistan, the United Kingdom and the United States—the latter primarily through NIH.

The National Heart Institute's interest is one of the major objectives of the study: to learn more in a short time about longer-term disturbances that occur in chronic heart failure and kidney disease.

Cholera innately offers a good opportunity for this type of re-

(See CHOLERA, Page 4)



This East Pakistani cholera patient is recovering from the disease at the Dacca Cholera Lab.

CHOLERA

(Continued from Page 3)

search, especially those aspects which concern body metabolism of salts and water.

Cholera is an intestinal disease that produces violent diarrhea and is associated with acute disturbances in the normal mechanism by which the bowel transports ions into the bloodstream. It is usually caused by unpurified drinking water or unsanitary living conditions. Sometimes the cholera victim dies of dehydration, "the same way a person would die if he were lost on a desert," Dr. Gordon said.

When a cholera patient is admitted to the lab in Dacca, the first concern is to replace the lost water by intravenous injections of fluid. The infection is then attacked with antibiotics. "If we can keep replacing the fluid while the disease runs its course, the patient will virtually always live and be cured," says Dr. Gordon.

Lancet Article Quoted

In a recent article in *Lancet*, a British medical journal, Dr. Gordon and his co-workers discuss the advantages of using antibiotics, specifically tetracycline.

"By using tetracycline we can cut in half the number of days patients have to be kept on intravenous fluids," they say.

Use of this antibiotic not only benefitted patients but also helped provide more space in the normally overcrowded hospital ward.

The group reported that tetracycline eliminated bacteria from the feces, shortened the duration of diarrhea, and decreased the requirements for intravenous fluids.

Dr. Gordon also explained that lingering doubts of the efficacy of cholera vaccine have never been settled, even though its use has been legally required since before 1900.

The Dacca lab is conducting field tests with the vaccine now but the results will not be available

Sidney Hillman Health Center Receives NIMH Grant For Worker Rehabilitation

The National Institute of Mental Health has awarded \$116,825 to the Sidney Hillman Health Center, New York City, for a project on mental health rehabilitation for a union population.

The grant, for the first year of a proposed 4-year period, will be under the direction of Hyman J. Wiener of the Sidney Hillman Health Center, who recently directed a successful project at the center to rehabilitate physically disabled union members and their families.

Jointly Sponsored

The Sidney Hillman Health Center is sponsored jointly by the New York Joint Board of the Amalgamated Clothing Workers of America, AFL-CIO, and the New York Clothing Manufacturers Association. A special committee composed of management and labor representatives will work on the project.

The NIMH-aided project has the following goals: 1) to establish the labor union as a resource to which to turn for help with emotional as well as physical problems, 2) to identify new techniques for case-finding and experiment with new methods of providing mental health

services to the union member and his family, 3) to identify the multiple roles a union mental health program may play in facilitating membership use of community resources, and 4) to develop guidelines to help re-integrate and/or maintain an emotionally ill worker on the job.

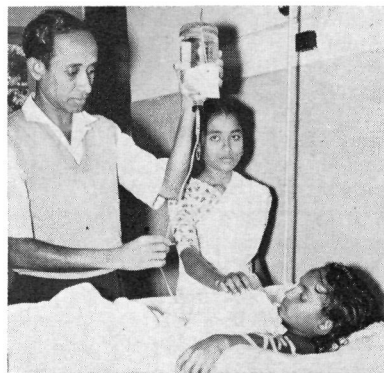
Team Is Professional

A professional mental health team, located at the health center, will function as the hub of the program. Treatment will also be made available through existing community mental health facilities.

Early case-finding procedures will be developed from the disability claims processed through the union insurance company, referrals from health center personnel, and a union-wide educational campaign.

Efforts to maintain and restore mentally ill workers to productive employment will be carried on by worker health committees, to be organized in clothing shops and union locals.

About 40,000 clothing workers plus their family members will be eligible for the new mental health services.



A male nurse, Mr. Imdad, administers an intravenous solution through the arm of a young patient. The nurse's aide provides reassurance.

for some months to come.

"The vaccine's usefulness," he said, "has been questioned and we certainly know that it does cause some discomfort. There is every reason to believe that the experience with the present test of the vaccine will give us an answer to the question."

Another question raised when Dr. Gordon went to Dacca was whether nutritional deficiency might play a part in making people susceptible to cholera. "This theory," he said, "has not been proven. No relationship has been found in this regard."

One of Dr. Gordon's most vivid memories is of a cholera epidemic in Dacca.

"In two weeks," he said, "150

Helen Watt of NCI Dies

Miss Helen Watt, clerk-typist in the Office of Associate Director for Field Studies, National Cancer Institute, died July 27 of a heart attack. She had attained 20 years of Federal service in 1963.

From 1943 to 1954 Miss Watt was with the Bureau of Supplies and Accounts, Department of the Navy, reaching the position of Military Payroll Supervisor. She came to NIH in 1955 as a payroll clerk with Financial Management Branch, OD, and transferred to NCI in 1957.

Miss Watt is survived by two cousins, one of whom is William M. Hart of Washington, D. C. Services were held July 29 at the Robert A. Pumphrey Funeral Home in Bethesda. Interment was in Taylorsville, N. C.

cases of cholera were admitted to the laboratory's experimental ward. Thirty-five arrived in one day, 20 in one hour."

Dr. Gordon and his staff worked nights and weekends treating patients, many of whom slept on the floor because of lack of beds. "All were cured," he said.

Back home, Dr. Gordon reflected on what these people in Dacca need most now—a larger patient ward, better facilities, more supplies?

"What they still need is more physicians to volunteer to go over there and help out," he said.

E. J. Stevens Appointed Ass't for Civil Defense To Draft Survival Plans

George P. Morse, Chief of the Plant Safety Branch, OD, has announced the appointment of Edward J. Stevens as Assistant for Civil Defense Mobilization at NIH.



Mr. Stevens

Mr. Stevens will develop plans to increase the survival chances of NIH employees and nearby Montgomery County residents in the event of major disaster. His first consideration is to develop shelter management and self-protection plans and organizations.

Under Mr. Stevens' direction, NIH buildings already marked as fallout shelters are to be stocked with food, water, medical and other supplies. He will supervise the training of NIH personnel to manage each shelter area.

He will also assist Mr. Morse in working with Public Health Service officials and NIH mobilization officials in developing national plans and procedures for an Emergency Health Service.

Background Cited

Mr. Stevens comes directly from three years as Civil Defense Coordinator with Region 4, Office of Emergency Planning in Battle Creek, Mich.

From 1956 to 1959, Mr. Stevens worked for the U.S. Department of the Navy in Washington as member of a 3-man group to study and implement a new system for setting overseas station allowances for all seven services.

Mr. Stevens spent 12 years (1944 to 1956) with the Automobile Manufacturers' Association in Washington as Congressional liaison man.

A graduate of the University of Michigan, Mr. Stevens received his B.A. degree there in 1934 and a Master of Business Administration degree in 1937.

Final Concert Aug. 20

The fifth and final in this season's series of outdoor band concerts for Clinical Center patients will be presented Thursday, August 20, at 7:30 p.m. by the U. S. Second Army Band on the CC first floor patio, east of the auditorium. In case of rain, the concert will be held in the auditorium.

NIH employees, their families and friends are invited to attend, although patients will have priority in seating. Arrangements for the event were made by the CC Patient Activities Section.

GRACE

(Continued from Page 1)

has been produced by GRACE for August of this year. It is a 609-page document, containing 13,733 different citations from the biomedical literature and a total of approximately 69,000 subject and author descriptive entries.

It contains more than 9 million characters or approximately 1.8 million five-letter words. GRACE processed this quantity of material in approximately 16 hours, including set-up, running and correction time.

"We feel that the August issue of Index Medicus is something of a historic document," Dr. Cummings said, "because of its great significance both to medicine and printing."

MEDLARS Described

MEDLARS is a system for the storage and retrieval of bibliographic citations from the world's biomedical literature. Citations prepared by literature analysts are stored on magnetic tape in a computer and retrieved electronically for various information purposes. More than half of the citations contained in MEDLARS are from the foreign biomedical literature.

In addition to Index Medicus and recurring bibliographies, MEDLARS can handle individual questions, called demand searches, on the contents of the literature in particular areas in terms of different scientific fields, language or time periods.

For recording the results of demand searches, MEDLARS uses the computer's high-speed printer which produces a block letter of 10-point size, uppercase only, at the rate of approximately 21,000 five-letter words per minute.

Contains 3 Components

For composing copy to be published in greater quantity, MEDLARS uses GRACE. Printing from the computer without interfering with the computer's own operations, GRACE contains three components: a magnetic tape transport, an electronic control unit, and an optical unit.

The output is in the form of rolls of positive film prints in 9-inch widths, with the type in three columns. After the film rolls are developed, they are printed through an offset process on pages nine inches wide by 11¼ inches deep.

GRACE is housed in two pieces of equipment on the floor of the MEDLARS computer room. One piece measures 56 by 54 by 36 inches, the other 54 by 72 by 37 inches.

GRACE was developed for NLM by the Photon Corporation, Wilmington, Mass., under subcontract to the General Electric Co., the MEDLARS contractor.

NIH SPOTLIGHT

Roland Faulkner Reviews 33 Years of Lab Work With Research Scientists

By Edith B. Roth

"Take NIH away from me, it would be like taking an arm or a leg. It's all I have ever known."

So said Roland R. Faulkner of the Comparative Pathology Section, Laboratory Aids Branch, Division of Research Services, after 33 years in NIH laboratories. As head of the tissue-processing laboratory, his present work is the preparation of experimental animal tissue for microscopic examination.

But this is just the most recent phase of a career that has given him the opportunity of working with many of the most distinguished medical researchers in this country.

"I am every bit trained at NIH," said Mr. Faulkner. "Everything I know, I know because of NIH—hematology, histology, pathology."

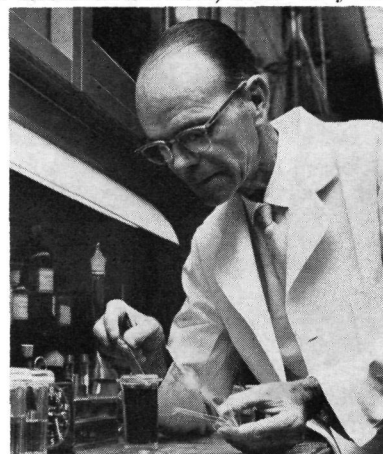
Starts at \$25 Per Week

In 1931, just one year after the old Hygienic Laboratory at 25th and E Sts., N. W., Washington, D. C., became the National Institute of Health, Mr. Faulkner was hired as a laboratory attendant and assigned to clean the animals and their cages for \$25 a week. (Animal caretakers today make \$1.50 to \$2.10 per hour.)

In those days, the animals used for research were limited to rats, mice, rabbits and guinea pigs. There were about 15 men working as their caretakers under the direction of a foreman.

Mr. Faulkner's memory for researchers and their fields is encyclopedic. He can recall that at the time he took his first lab job Dr. Joseph Goldberger was doing work on pellagra and Dr. Edward Francis was researching tularemia.

He remembers that Dr. William



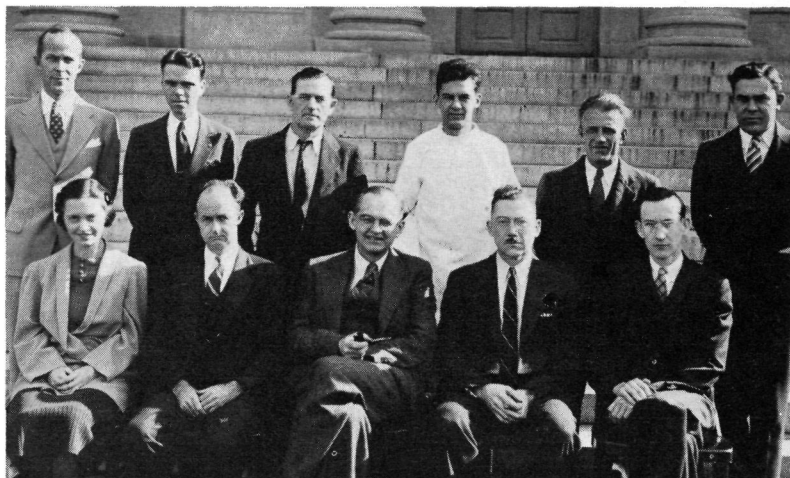
Standing at his laboratory bench Mr. Faulkner stains blood smears to demonstrate filaria (heart-worm, a disease of dogs) to summer student researchers.—Photo by Sam Silverman.

Henry Sebrell, Jr., (who was to become Director of NIH, 1950-55) was then studying nutritional deficiencies, Dr. Charles Armstrong was testing for parrot fever, and Dr. R. D. Lillie was the sole pathologist for the entire laboratory, which employed 100 people, 17 of them doctors.

Of this group, only Dr. Armstrong is still at NIH. Technically in retirement, at 78 he still comes to work every morning in a lab in Building 7 set aside for his use.

A great deal of alcohol is needed

(See SPOTLIGHT, Page 8)



This picture, taken in 1937, shows Roland R. Faulkner (standing, second from left) with the entire staff of the NIH Laboratory of Pathology. Seated, 1 to r: Miss Windle, secretary (retired); Dr. L. L. Ashburn (retired); Dr. R. D. Lillie, pathologist (retired); Dr. Arthur Nelson, now Chief Pathologist at Food and Drug Administration; Dr. Thomas Tomlinson (retired). Standing, 1 to r: Dr. Theo. Perrin, pathologist (retired); Mr. Faulkner; Carl Holtz, head technician (deceased); Joseph Woodworth, now with Office of the Director, Supply Management Branch; Roy Reed, present Head of NIAMD Pathology Lab; Dr. Thomas Crahan, retired from NIH, now in active practice in Baltimore.

NCI, NASA Cooperating In Study of Chemicals Related to Plant Growth

The National Cancer Institute and the National Aeronautics and Space Administration will cooperate in a one-year medical research project to study the anti-cancer, carcinogenic, and anti-radiation potential of a family of chemicals closely related to plant growth regulators.

The research will be conducted in the Space and Information Systems Division of North American Aviation, Inc., Downey, Calif., under a \$198,185 contract with the Public Health Service.

The Public Health Service's National Cancer Institute will provide technical direction for the project, which will be financed through a transfer of funds by the National Aeronautics and Space Administration as a part of its Technology Utilization Program.

Uses Byproduct Knowledge

It is through this program that NASA cooperates with industry and other agencies so that new knowledge obtained as a byproduct of space research can be further developed and disseminated for the benefit of all mankind.

The cooperative project will extend studies that were done under the NASA research program aimed at protecting man in space.

In the earlier studies, Drs. Robert D. Schultz and David Norman of North American's Life Sciences Department initially showed that certain plant growth regulators prolong the life of cancer cells in test tubes, but that by altering these compounds they were able to demonstrate a lethal effect on the cells. Mixture of the regulators and their related compounds were found even more lethal.

Will Study Effects

Under the direction of Dr. Hans Falk, Chief of the Carcinogenesis Studies Branch, National Cancer Institute, Dr. Schultz and his associates will now study the effects of a variety of plant growth regulators and their derivatives on tumor cells in test tubes and in laboratory animals.

The effects of these compounds on the survival of irradiated normal and tumor-bearing mice will also be investigated.

Intensive study of the ways in which members of this family of compounds interact with normal and tumor cells will, hopefully, provide clues to a better understanding of cancer causation, prevention and treatment as well as the relationship of these compounds to radiation protection.

Columbia to Get Corneal Diseases Research Center

A highly specialized research center to study diseases of the cornea (of the eye) will be established as the result of a \$1.6 million grant to the College of Physicians and Surgeons, Columbia University, by the Public Health Service.

Announcement of the grant was made jointly by Surgeon General Luther L. Terry and Dr. H. Houston Merritt, Dean of the College of Physicians and Surgeons.

The new center will have the most comprehensive research program devoted exclusively to studying the normal and diseased cornea. It will include coordinated laboratory and clinical studies by surgeons, biochemists, virologists, pathologists, anatomists, physiologists and immunologists.

Dr. Arthur G. DeVoe, Professor of Ophthalmology, and Dr. Anthony Donn, Instructor in Ophthalmology, will head the corneal center.

Grant for 6 Years

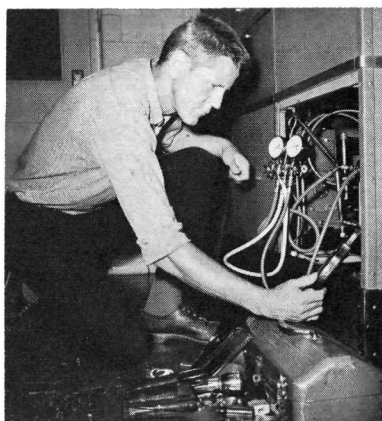
The \$1.6 million grant, to be spread over six years, has been awarded to Columbia through the National Institute of Neurological Diseases and Blindness. First year's support is for \$478,572; continuing support has been approved for five additional years, provided funds are appropriated and made available to the Public Health Service for this purpose.

Interior construction of facilities is beginning this month at the Institute of Ophthalmology at the Columbia-Presbyterian Medical Center, New York City. Most of the fifth floor of the Institute of Ophthalmology, formerly used as nurses quarters, will be rebuilt as laboratories. The 4,000 square foot area will be ready for the scientists in early 1965.

The cornea, often called the "window of the eye," is the thin, transparent, outermost membrane which covers the iris and pupil like a watch crystal. It is subject to at least 100 diseases of various origins. The most serious ones, such as trachoma, cause clouding or scarring of the delicate membrane, with consequent loss of vision.

A major part of the new center's work will be an intensified study of corneal transplants, a field in which the Columbia-Presbyterian Medical Center has pioneered. Corneal transplantation involves replacing a patient's irreparably damaged cornea with a healthy one taken from the eye of a recently deceased person.

Some corneal transplants are effective and remain transparent,



Refrigeration mechanic Fairfax Atherton repairs ultracentrifuge cooling unit in response to an emergency call to the North Buildings Unit trouble desk in Building 13.—Photo by Bob Pumphrey.

TROUBLE DESKS

(Continued from Page 1)

clude plumbers, electricians, refrigeration mechanics, elevator repairmen, equipment repairmen and carpenters.

Some of these craftsmen carry radio "Pagemasters" so that they may be located quickly.

One trouble desk, the Clinical Center Unit, is located in Building 10 and handles only calls from that building.

Calls from all other buildings north of South Drive go to the North Buildings Unit. All other calls go to the South Buildings Unit. Dispatching offices for these latter two units are located on the second floor of Building 13.

Week Is Average

On, the average, most work resulting from trouble calls is completed within one week. Sometimes a trouble call turns out to be the symptom of extensive deficiencies that require major work.

In such cases the trouble call is converted by PEB to a formal written work request so the problem can be studied and planned in detail for proper solution.

Instructions on how to call the PEB trouble desks are contained in item 13, page 114 of the yellow pages in the NIH directory.

while others become cloudy. Certain researchers believe the same kind of immune reaction the body builds up to reject transplanted organs, such as kidneys, may cause corneal transplant failures.

Because of the relative physical ease of studying corneas, these doctors hope much can be learned about the basic mechanism of immune reactions—knowledge that might be applicable to other body tissues and even organs.

Laboratory and clinical research also will go forward in other areas: corneal vascularization—a condition that occurs when blood vessels grow into the normally clear cor-

Robert Runkle Describes Housing for Lab Animals

Guidelines for the design and selection of materials for adequate animal housing facilities were presented in a 2-part article, "Laboratory Animal Housing," by Robert S. Runkle of the Division of Research Service's Research Facilities Planning Branch, published in the American Institute of Architects Journal. The article summarizes years of experience at NIH in designing and building laboratory animal facilities.

Reprints may be obtained from the Information Office, Division of Research Services, National Institutes of Health, Bethesda 14, Md.

DR. STONE

(Continued from Page 1)

raised the Division of General Medical Sciences (established in 1958) to Institute status in 1962.

Dr. Stone joined the U.S. Public Health Service and came to NIH in 1948 where he served until 1954 in various capacities, first as Chief of the Research Fellowships Branch in the Division of Research Grants (until 1951), and then as Chief of the Extramural Programs in the National Institute of Neurological Diseases and Blindness (to 1954).

From 1954 to 1955 Dr. Stone was Assistant Vice Chancellor for professional services in the Schools of the Health Professions at the University of Pittsburgh, and from 1955 to 1956 was Director, Medical and Scientific Department, National Multiple Sclerosis Society, New York City.

Returns Here in '56

Dr. Stone returned to NIH in 1956. He served as Assistant to the Associate Director, NIH, from 1956 to 1957, and as Assistant Chief, Division of Research Grants, 1957 to 1958. In 1958 he became Assistant Chief of the new Division of General Medical Sciences and Chief of its Research Training Branch.

Born in Biloxi, Miss., in 1915, Dr. Stone received his B.S. degree from Middlebury College, Vermont, in 1937, and his Ph.D. degree at the University of Rochester in 1948. During World War II, he served in the U.S. Marine Corps.

nea; development of new surgical techniques; corneal prosthesis—perfection of new artificial corneas made of clear plastic and the methods of installing them in the human eye; virology—thorough examinations of the many viruses which can infect the cornea and cause blindness; and corneal biochemistry—research into the complex chemical structure of the cornea in an attempt to understand how it remains transparent.

Drs. Farber, Van Hoek Appointed by DRFR as Program Specialists

Dr. Roger Evan Farber and Dr. Robert Van Hoek have been appointed Program Specialists in the General Clinical Research Centers Branch of the Division of Research Facilities and Resources.

In their new assignments they will be concerned with the review of grant applications, counselling and assisting grantees, participating in site visits, administering funds, and other activities associated with establishing general clinical research centers and evaluating their research programs.

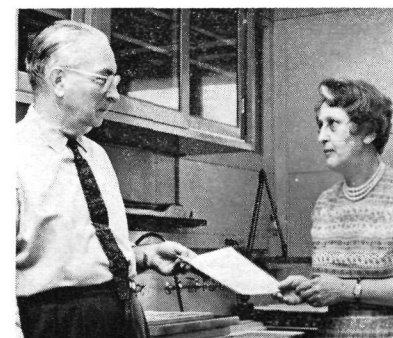
A general clinical research center is a special hospital ward of eight to 30 beds with its own staff, laboratories and facilities where scientists in many disciplines conduct intensive, rigidly controlled research studies on carefully selected patients.

Receive \$78 Million

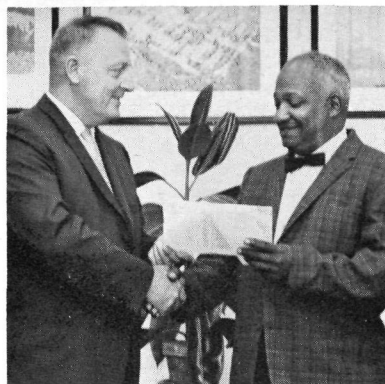
At present there are 78 centers with approximately 1,000 beds in 30 states, the District of Columbia, and Puerto Rico. Since the inception of the program in 1960, almost \$78 million has been awarded for support of these centers.

Dr. Farber, a native of Buffalo, N.Y., attended the University of Buffalo and the University of Pennsylvania Medical School where he received his M.D. in 1963. He interned at the Buffalo General Hospital.

Born in New York City, Dr. Van Hoek received his B.S. from the City College of New York and his M.D. from the College of Physicians and Surgeons, Columbia University. He interned at St. Luke's Hospital in New York and then served as resident physician in the Bronx V.A. Hospital in that city.



Dr. Wilhelm C. Hueper, Head of the Environmental Cancer Section, NCI, presents a Sustained Superior Work Performance Award to Johanna M. Zuefle of his section for "consistently demonstrating extraordinary technical skill and professional reliability in the performance of her duties." Miss Zuefle has worked with Dr. Hueper for almost 30 years, the last 16 here at NCI.—Photo by Ralph Fernandez.



Donald R. Cushing, Chief of the Office Services Branch, OD (left), presents a certificate and cash award to Perry M. Catlett, Printing Plant Equipment Repairer, for sustained superior performance in recognition of his ingenuity and resourcefulness in making repairs to printing plant equipment during peak workload periods with a minimum of lost time.—Photo by Ralph Fernandez.

NIMH, 2 Other Groups Study Early Child Care

A joint conference on early child care, bringing together national experts in this field, recently was held at the National Institute of Mental Health.

The meeting—an NIMH research utilization conference—was sponsored by NIMH, the American Public Health Association's Day Care Committee, and Children's Hospital, Washington, D.C.

The group of outstanding child specialists decided to meet regularly to explore optimum settings for early child care and re-evaluate current concepts of family and group care of infants and pre-school children in the light of newest research findings.

Many Professions Represented

Conferees included pediatricians, child psychiatrists, psychologists, child welfare workers, public health nurses, social scientists and specialists in early childhood education, as well as officials from the Office of the Secretary, Department of Health, Education, and Welfare; the Welfare Administration, including the Children's Bureau; NIMH; and the National Institute of Child Health and Human Development.

Future meetings will explore a number of areas of childhood emotional and personality development. New research findings related to mother-child relations, and especially concepts of maternal deprivation upon which some present child-care practices are based, will be studied.

It was noted that no single pattern of care will fill all requirements, and that centers must operate in conjunction with other community resources.

NHI Issues Leaflet on Smoking and the Heart

"Smoking and The Heart," a new leaflet in the health information series of the Public Health Service, was issued recently by the National Heart Institute.

The new leaflet is based on the report on Smoking and Health of the Advisory Committee to the Surgeon General of the Public Health Service, issued last January.

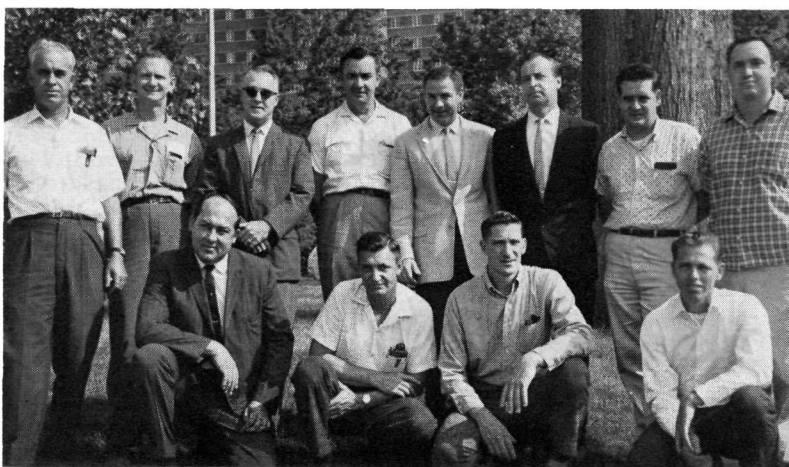
It also cites evidence associating cigarette smoking with coronary heart disease, from a PHS study conducted by NHI in Framingham, Mass., on the development and progression of heart disease.

This study indicates that cigarette smoking increases, by two to three times, the risk of a heart attack over the risk experienced by non-smokers. It also shows that those who stop cigarette smoking have a lower coronary death rate than those who continue to smoke.

Free Copies Available

The leaflet gives a brief explanation of the complex problems of heart disease and smoking and the various kinds of heart disease, and points out that more knowledge is needed before complete answers concerning the causes, cure, and prevention of heart disease are available.

Single, free copies of the leaflet—PHS Publication No. 1103-b—may be requested from the Public Inquiries Branch, Public Health Service, Washington, D. C. 20204; or from the Heart Information Center, National Heart Institute, Bethesda, Md., 20014. Copies also may be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20204, at five cents each or \$2.00 per hundred.



Eighteen employees of the Plant Engineering Branch, Division of Research Services, recently completed a 9-month course in Refrigeration and Air-Conditioning, the fourth such course conducted for PEB by Martin L. Jeter, Head of the North Building Unit. Left to right, standing: V. L. Chrisman, W. E. Howard, C. W. McKnight, C. L. Cessna, C. L. Schumacher, C. T. Razum, H. W. Davis and J. W. Wright. Kneeling: Mr. Jeter, R. C. Metzger, C. C. Modzel, D. F. Karman. Not in picture: C. E. Bennett, D. B. Coffman, D. J. Farley, R. W. Fuhrer, L. E. Ingberg, F. K. McDaniel, J. R. Hyatt.—Hubbard Photo.

Use of Revolving Fund Proves Effective In Financing of Essential Services Here

By Bob Walters

Units operating like small business organizations have proved to be an effective and efficient way to provide many essential services and supplies needed to support the NIH research program.

The Self-Service Stores (for office supplies) in Building 31 and the Westwood Building are examples of such an operation, with open shelves and a check-out counter much like a modern supermarket.

Another example is the Computation and Data Processing services that are paid for by the users much as one would if purchasing these services from a data processing firm.

Others Are Similar

Other operations of this type at NIH are Central Stores, Linen Stores, Animal Food and Bedding, Plant Engineering Shop Stores, Animal Production, and Instrument Fabrication and Systems Maintenance.

What these have in common and what makes them operate like business organizations is that they are financed under a revolving fund.

One of the major methods of financing central service and supply operations at NIH, the revolving fund is used where there are readily identifiable services or supplies that can be charged to individual users.

In this type of financing, after the necessary capital is supplied to start the operation, the unit obtains additional operating funds through direct charges to customers as services are performed or supplies furnished.

These charges are established on the basis of rates that are sufficient to recover all expenses of the operation, including that of personnel costs. Hence, they operate

like a regular business organization.

The revolving fund, managed by Howard Kettl, Assistant Executive Officer of NIH, has a dollar flow of over \$7 million a year. Current total assets equal about \$1.5 million.

The manager is advised on revolving fund operation by the NIH Revolving Fund Advisory Board. This group reviews the operations of the units financed by the revolving fund and evaluates new proposals concerning changes or additions to the fund.

The Board consists of five members appointed by the Executive Officer of NIH. Current membership includes two lab chiefs, two executive officers, and a representative of the Financial Management Branch, OAM.

Members Little Known

This little-known group helps to guarantee that the NIH staff gets the best in services for the money contributed to the fund.

To insure that the revolving fund serves its ultimate function of supporting the NIH research programs, no proposal can pass the Board unless at least one of the representatives of the scientific staff is in favor.

Since one of the functions of the Board is to improve research services financed under the fund, its members would like more users of these services at NIH to know of the Board's activities so that the customers' views and opinions could be brought before the Board.

Current membership on the Board includes Dr. D. P. Rall of NCI, Chairman; J. G. DuBay of DRS, Vice Chairman; J. W. Finn of FMB, Dr. C. W. Hiatt of DBS, and G. J. Klov Dahl of DRFR. J. G. Bouvet of FMB serves as Secretary to the Board.

1,500 Fellowships Given By Office of Education

Award of 1,500 federally financed graduate fellowships was announced July 24 by the U.S. Office of Education, DHEW.

The fellowships will finance graduate students scheduled to attend 156 colleges and universities in 50 States and the District of Columbia during the 1964-65 academic year opening in September.

The program is designed to increase the number and quality of students preparing for college teaching.

Nervous Hyperactivity in Congestive Heart Cases Causes NE Depletion

National Heart Institute scientists report that persistent sympathetic hyperactivity in patients with congestive heart failure is associated with partial depletion of cardiac stores of norepinephrine (NE) and that this NE deficit may be further increased by the stress of open-heart surgery.

When unusual burdens are imposed on the heart by hypertension, congenital malformations, rheumatic valvular disease, or other factors, a number of mechanisms come into play to assist the overtaxed heart in meeting its circulatory obligations.

Perhaps the most important source of support is the sympathetic nervous system. Increased sympathetic activity liberates larger amounts of NE from the stores maintained in heart muscle. This powerful cardiac stimulant increases heart rate and also the vigor and efficiency of its contraction.

Clinical Studies Described

In clinical studies on the role of the sympathetic nervous systems in congestive heart failure, NHI scientists compared sympathetic activity in cardiac patients with and without congestive heart failure, using urinary NE excretion as an index. Subsequently, they assessed the effects of that activity on heart NE stores.

As expected, sympathetic activity was elevated in patients with congestive failure. Their average daily NE excretion (about 49 ug.) was more than double that of the control subjects (about 20 ug.).

Fifteen patients whose congestive failure was due to congenital or acquired heart defects subsequently underwent corrective surgery. At operation, tissue was obtained from the atrial appendage and the ventricular papillary muscle. The NE content of this tissue was compared with that of atrial tissue obtained at operation in patients without congestive failure.

Depletion Noted

In the patients with congestive failure, the NE concentration of the atrial appendage was less than half that of similar tissue from the controls (0.58 ug/gm versus 1.62 ug/gm).

The NE content of papillary muscle (0.77 ug/gm) also appeared to be abnormally low in congestive failure, though no control measurements were available.

During the first post-operative day, the patients with congestive heart failure showed a further sharp increase in urinary output of



Shown here with Dr. Cornelius B. Philip, Director of NIAID's Rocky Mountain Laboratory at Hamilton, Mont. (left), and Mrs. R. M. Gerer, Chairman of the Ravalli (Mont.) Cancer Society (third from left), are 11 Montana high school students and recent graduates currently serving as lab assistants there under American Cancer Society student fellowships. The students are, from left: Tom Gibson, Don Johannesen, Diane Popham, Thora Loftsgaard, Don Olsson, Jr., Suzanne Revell, Carolyn Fuhrman, Adele Waldo, Holly Wilson, Beth Ann Skillman, and Nancy Zeihen. A twelfth student, Judith Ellen Bragg, was not available for the picture-taking.—RML Photo.

SPOTLIGHT

(Continued from Page 5)

for lab work, Mr. Faulkner pointed out. But he recalled that in 1931 Prohibition was still in effect and alcohol was a sacred commodity. It was delivered to the lab, he said, by Treasury truck under armed guard. After it arrived, it was colored red or blue with harmless dyes, to forestall the development of any illegal thirsts.

When NIH moved to Bethesda in 1938, Mr. Faulkner had a number of important assignments. One of them was to work with Dr. Joseph Bragdon in an atherosclerosis lab. It was in this lab that the present method used in the National Heart Institute to determine the amount of cholesterol in the blood had its beginnings.

Up to 1950, Mr. Faulkner said, the ailments and epidemics among research animals had been treated as they happened, "by guess and by gosh." Yet if tests on animals were to present scientists with con-

norepinephrine and its principle metabolite (vanil-mandelic acid), excretion rising by 127 percent and 97 percent, respectively.

The scientists conclude that the persistently elevated sympathetic activity accompanying congestive heart failure reduces cardiac stores of NE. This hyperactivity is augmented by the stress of surgery and can further deplete heart NE reserves, with possibly deleterious effects on heart-muscle contractility.

These findings were reported at the meeting of the American Federation for Clinical Research by Dr. C. A. Chidsey of the Cardiology Branch and Dr. Andrew G. Morrow of the Surgery Branch.

clusive evidence, the animals had to be free of disease.

With the establishment of the Comparative Pathology Section in 1950, under the direction of Dr. Wm. T. S. Thorpe, research was started into animal ailments and diseases, with prevention the goal.

Research into one of these diseases, Bartonella Muris, a blood disease of rats and mice, was assigned Mr. Faulkner by Dr. Thorpe. His 4-year study showed that the disease was transmitted by the rat flea *Polypylax Spinulosa*.

Mr. Faulkner developed an eventual Bartonella-free rat and mouse colony by using a dusting compound on pregnant animals and their offspring. Results of his further studies, showing the disease in periods of latency, were published in the *Journal of Infectious Diseases* in 1957.

Plays Many Parts

In 1954 the NIH Animal Hospital was opened. Mr. Faulkner was chosen to organize it, to order drugs and instruments, and to hire and train many of the employees.

Until the full staff came on duty, he played many roles. He doubled as X-ray technician and as surgical assistant and anesthesiologist. He also worked in clinical pathology and assisted at autopsies.

It was after five years in the Animal Hospital that Mr. Faulkner was put in charge of a new histology lab in the Comparative Pathology Section, where he now works.

Throughout a long career, Mr. Faulkner has kept a careful record of techniques, including many he developed himself. When Dr. Lillie, the pathologist at the Hygienic Laboratory, wrote his now-classic, "Histopathology, Technic and Practical Histochemistry" in 1948,

CC Patients' Carnival To Be Festive Affair

The Second Annual Clinical Center Patients' Carnival is scheduled to be held tomorrow (Aug. 12) in the outdoor recreation area from 6:30 p.m. until dark.

The event, regarded by the patients as one of the year's highlights, was planned by the CC Patient Activities Section with assistance from many individuals and organizations in the community.

Dr. Jack Masur, CC Director, will cut the ribbon to open the festivities.

Along with clowns, refreshments and prizes, there will be booths featuring Polaroid pictures, helium balloons, and duckpin toss. Music will be provided by the U. S. Navy Band.

A Disneyland effect will be achieved by a miniature train that travels around the grounds offering free rides.

Provided for the occasion by the Sheraton-Park Hotel, the train is normally used to transport guests and their luggage about the hotel.

Film, 'One Day's Poison,' Scheduled Rest of Week

Safety will be the subject of "One Day's Poison," the third presentation in the Health Film Series sponsored by the Employee Health Service in cooperation with the Employee Development Section of the Personnel Management Branch.

The story shows why accidental poisoning kills more children under six years of age than all infectious diseases. It follows through one morning in the life of a harassed housewife who, busy with her chores, leaves her three-year-old playing by himself in full view of a bottle of children's headache pills containing acetylsalicylic acid.

Introductory remarks at the showings will be made by John R. Leach, Chief of the Safety Section, Plant Safety Branch.

The showings are scheduled as follows:

Clinical Center, Wednesday, August 12—11:45 a.m. and 12:30 p.m. Robin Building, Thursday, August 13—11 and 11:45 a.m., 1 and 1:45 p.m. Westwood Building, Friday, August 14—1, 1:45 and 2:30 p.m.

he found Mr. Faulkner's notebooks of great value and named him in his list of acknowledgments. He also published a few of Mr. Faulkner's original techniques.

Although he has lived 33 years of NIH lab history, Mr. Faulkner is only 55 years old and is not thinking of retirement. "I've got a lot more good years here ahead of me," he said with a smile.